

OFI TESTING EQUIPMENT, INC.
MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT AND COMPANY IDENTIFICATION	
Chemical Name:	Bromine Water
Trade Name:	Bromine Water
OFI Part No.	144-941
Chemical Family:	Halogen
Formula:	Br ₂ · H ₂ O
Manufacturer:	OFI Testing Equipment, Inc. 11302 Steeplecrest Drive Houston, TX 77065 USA Phone: (713) 880-9885
In Case of Emergency Spills, Leaks, Fire, Exposure or Accident:	In the USA, call INFOTRAC at 1-800-535-5053 day or night Outside the USA, call collect, (352) 323-3500
SECTION II - COMPOSITION / INFORMATION ON INGREDIENTS	
CAS #:	CHEMICAL NAME
7732-18-5	Water 97.2%
7726-95-6	Bromine 2.8%
SECTION III - HAZARD IDENTIFICATION	
Emergency Overview:	Danger! Corrosive. May Be Fatal If Swallowed Or Inhaled. Causes Severe Burns To Every Area Of Contact. Affects Respiratory System, Eyes, Central Nervous System And Skin. Strong Oxidizer. Contact With Other Material May Cause Fire.
Inhalation:	Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Causes respiratory tract irritation with possible burns.
Ingestion:	May Cause Sore Throat, Abdominal Pain, Nausea, and Severe Burns of the Mouth, Throat, and Stomach. Severe Exposures can Lead to Shock, Circulatory Collapse, and Death!
Skin:	Can cause Redness, Pain, and Severe Skin Burns. Irritation may lead to chemical pneumonitis and pulmonary edema.
Eye Contact:	May Cause Redness, Pain, Blurred Vision, Eye Burns, and Permanent Eye Damage.
Chronic Exposure:	No Information Found.
Aggravated by Exposure:	Persons with Pre-Existing skin Disorders or Eye Problems, or Impaired Respiratory Function may be More Susceptible to the Effects of the Substance.
SECTION IV - FIRST AID MEASURES	
Inhalation:	Remove to Fresh Air. If not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.
Ingestion:	Do Not Induce Vomiting! Give 2-4 cupfuls of Milk or Water. Never Give Anything by Mouth to an Unconscious Person. Get Medical Attention Immediately.
Skin:	In Case of Contact, Immediately Flush Skin with Plenty of Water for at Least 15 Minutes while Removing Contaminated Clothing and Shoes. Wash Clothing and Shoes Before Reuse.
Eyes:	Immediately Flush Eyes with Plenty of Water for at Least 15 Minutes, Lifting Lower and Upper Eyelids Occasionally. Get Medical Attention Immediately.
SECTION V - FIRE FIGHTING MEASURES	
Fire:	Not Considered to be a Fire Hazard.
Explosion:	Not Considered to be an Explosion Hazard.
Fire Extinguishing Media:	For small fires, use dry chemical, carbon dioxide, water spray or alcohol resistant foam.
Special Information:	In the Event of Fire, Wear Full Protective Clothing and NIOSH-Approved Self-Contained Breathing Apparatus with Full Facepiece Operated in the Pressure Demand or Other Positive Pressure Mode.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Ventilate area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering. Contain and Recover Liquid when Possible, then Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and place in a Chemical Waste Container. Do Not Use Combustible Materials, such as Saw Dust. Do Not Flush to Sewer! US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

SECTION VII - HANDLING AND STORAGE

Store in a Cool, Dry, Ventilated Storage Area with Acid Resistant Floors and Good Drainage. Protect from Physical Damage. Keep Out of Direct Sunlight and Away from Heat, Water, and Incompatible Materials. Do Not Wash out Container and Use it for Other Purposes. Containers of this Material May be Hazardous when Empty Since they Retain Product Residues (Vapors, Liquid).

SECTION VIII - EXPOSURE CONTROL / PERSONAL PROTECTION

Ventilation System:	A System of Local and/or General Exhaust is Recommended to Keep Employee Exposures Below the Airborne Exposure Limits. Local Exhaust Ventilation is Generally Preferred Because it can Control the Emissions of the Contaminant at its Source, Preventing Dispersion of it into the General Work Area.
Airborne Exposure Limits:	OSHA Permissible Exposure (PEL) none listed (TWA) ACGIH Threshold Limit Value (TLV) .1mg/m ³ (TWA), .2 mg/m ³ (STEL)
Personal Respirators: (NIOSH APPROVED)	If the Exposure Limit is Exceeded, a Full Facepiece Respirator with High Efficiency Dust/Mist Filter may be Worn up to 50 times the Exposure Limit or the Maximum use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest. Emergencies Where Exposure Limits are Not Known, use Full-Facepiece Positive-Pressure Air Supplied Respirator.
Skin Protection:	Rubber or Neoprene Gloves and Additional Protection Including Impervious Boots, Apron, or Coveralls, as Needed in Areas of Unusual Exposure to Prevent Skin Contact.
Eye Protection:	Use Chemical Safety Goggles and/or Full Face Shield where Splashing is Possible. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Odor:	Liquid clear orange/Slight odor
Solubility:	Soluble in Water.
Specific Gravity:	1.009
pH:	2.6
% Volatiles by Vol.:	Not available
Melting Point:	Not available
Boiling Point:	212 ^o F
Vapor Density (Air=1):	Not available
Vapor Pressure (mmHg):	Not available

SECTION X - STABILITY AND REACTIVITY

General Reactivity:	Stable Under Ordinary Conditions of Use and Storage.
Hazardous Decomposition:	Hydrogen bromide
Incompatibilities:	Bromine is incompatible with acetaldehyde, acetylene, acrylonitrile, aluminum, ammonia, antimony, boron, calcium nitride, cesium acetylene carbide, cesium monoxide, chlorotrifluoroethylene and oxygen, copper hydride, copper acetylde, dimethyl formamide, ethyl phosphine, fluorine, germanium, hydrogen, iron carbide, isobutyrophenone, lithium, lithium carbide, lithium silicide, magnesium phosphide, methyl alcohol, nickel carbonyl, nitrogen triiodide, olefins, oxygen difluoride, ozone, phosphine, phosphorus, phosphorus oxide, phosphorus trioxide, potassium rubidium acetylene carbide, rubidium carbide, silver azide, sodium, sodium acetylene carbide, sodium carbide, strontium phosphide, tin, uranium dicarbide, and zirconium dicarbide.
Hazardous Polymerization:	Has not been reported.

SECTION XI - TOXICOLOGICAL INFORMATION																	
Carcinogenic References:	IARC Category - None, NTP Carcinogen - Known: No																
SECTION XII - ECOLOGICAL INFORMATION																	
Environmental Fate:	When Released into the Soil, This Material may Leach into Groundwater.																
Environmental Toxicity:	This material is expected to be toxic to aquatic life.																
SECTION XIII - DISPOSAL CONSIDERATIONS																	
Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.																	
SECTION XIV - TRANSPORT INFORMATION																	
Shipping Name:	Bromine Water																
Hazard Class:	8																
Identification No.:	UN1744, Packing Group I																
SECTION XV - REGULATORY INFORMATION																	
Chemical Inventory Status – Part 1:	<table border="0"> <tr> <td>Ingredient</td> <td>TSCA</td> <td>EC</td> <td>Japan</td> <td>Australia</td> </tr> <tr> <td>-----</td> <td>----</td> <td>----</td> <td>----</td> <td>-----</td> </tr> <tr> <td>Bromine (7726-95-6)</td> <td>Yes</td> <td>Yes</td> <td>NE*</td> <td>Yes</td> </tr> </table>	Ingredient	TSCA	EC	Japan	Australia	-----	----	----	----	-----	Bromine (7726-95-6)	Yes	Yes	NE*	Yes	
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Chemical Weapons Convention:	No																
TSCA 12 (b):	No																
CDTA:	No																
SARA 311/312:	Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactivity: Yes (Pure / Liquid)																
Australian Hazchem Code:	2XE																
Poison Schedule:	S7																
SECTION XVI - OTHER INFORMATION																	
NFPA Rating:	HEALTH-U, FLAMMABILITY-0, REACTIVITY-0																
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